With respect to the §102(e) rejections, Applicant submits that the Office Action fails to present a reference that teaches or suggests all aspects of the claimed invention. Claim 8 is directed to an LED luminaire including, for example, "an array of light sensors, each light sensor associated with an LED or group of LEDs, each light sensor positioned to intercept and measure at least a portion of the light output of its associated LED or group of LEDs." In an attempt to provide correspondence to these limitations, the '568 reference erroneously asserts that the Roper Scientific CoolSnap camera (digital camera), item 61 of Fig. 4a, teaches or suggests such limitations.

Digital camera 61, however does not correspond to "an array of light sensors, each light sensor associated with an LED or group of LEDs, each light sensor positioned to intercept and measure at least a portion of the light output of its associated LED or group of LEDs." As shown in the attachment, the CoolSNAP camera uses CCD technology to capture images in high-resolution color microscopy. As is well known and described in the attachment, S.M. Sze, <u>Semiconductor Devices Physics and Technology</u>, John Wiley & Sons, 1985, p. 491, CCD technology involves an array of MOS diodes as shown in Figure 22 of the attached background reference. There is no association of individual light sensors with a specific LED or group of LEDs as claimed. Further, the '568 reference fails to teach the claimed limitations regarding intercepting and measuring a portion of the light output. According to Applicant's specification, the light sensors (photodiodes) of the instant application are placed in such a manner that an equal fraction of light is sampled and measured from each LED while allowing sufficient stray light from the LEDs to fall on the light sensors to insure satisfactory operation of a feedback loop. *See*, page 1, last paragraph. The '568 camera merely takes an image of a sample without the claimed association between sensors and LEDs or intercepting and measuring capabilities.

Claim 10 depends from claim 8 and is likewise not taught by the '568 reference as discussed above. As such, Applicant requests that the rejections be withdrawn.

Applicant respectfully traverses the §103(a) rejection of claim 9 because the cited '783 reference is not prior art pursuant to 35 U.S.C. §103(c) and the remaining '568 reference fails to support a *prima facie* case of obviousness. As set forth in M.P.E.P. §706.02(l)(1), effective November 29, 1999, subject matter which was prior art under former 35 U.S.C. §103 via 35 U.S.C. §102(e) is now disqualified as prior art against the

claimed invention if that subject matter and the claimed invention "were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person." The '783 reference is, and has been over the entire relevant time period when the instant invention was made, owned by the same entity, Koninklijke Philips Electronics ("Philips"), or subject to an obligation of assignment to the same entity assigned to the same assignee of the instant application. These common assignments are evidenced by the cover sheet of the '783 reference (to Philips Electronics North America Corp., a subsidiary of Koninklijke Philips Electronics), and by the instant assignment recorded at reel/frame number 012198/0128.

The Office Action acknowledges that the '568 reference fails to disclose that the light sensors are associated with a group of three LEDs. Without complete correspondence to the claimed invention, the §103 rejection must fail. As such, Applicant requests that the §103 rejection be withdrawn.

In view of the remarks above, Applicant believes that each of the rejections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Mr. Eric M. Bram, of Philips Corporation at (914) 333-9635.

Please direct all correspondence to:

Corporate Patent Counsel
Philips Electronics North America Corporation
580 White Plains Road
Tarrytown, NY 10591-5190

By: ______________________
Name: Robert J. Crawford
Reg. No.: 32,122

Encls.: One data sheet for CoolSNAP camera by Roper Scientific, www.roperscientific.com

S.M. Sze, Semiconductor Devices Physics and Technology, John Wiley & Sons, 1985, p. 491

DATA SHEET

COOLSNAP CF SYSTEM

CoolSNAP cf Color

Photometrics

1392 x 1040 imaging array
4.65 x 4.65-µm pixels

The Photometrics CoolSNAP$_{cf}$ Color camera incorporates cooled CCD technology and low-noise electronics to achieve superior low-light sensitivity and color fidelity. A 1392 x 1040 resolution sensor with small, square pixels ensures that each image shows extraordinary detail. This feature, along with a high-speed digitizer, shutterless operation, and an interline CCD, makes the CoolSNAP$_{cf}$ Color camera ideal for high-resolution color microscopy.

FEATURES	BENEFITS
20-MHz digitization	Fast image readout for high-speed focus and image capture
1392 x 1040 imaging array 4.65 x 4.65-µm pixels	Resolves fine detail
Progressive-scan CCD	Full resolution in every frame
12-bit digitization	Quantifies both bright and dim signals in the same image
Thermoelectric cooling	Increases integration times for higher sensitivity
C-mount	Easily attaches to microscope
Compact camera head	Low profile on microscope
PCI interface	Works with PC or Macintosh
Dual-mode operation	Allows fast gray-scale focusing and high-resolution color imaging
Acquisition software	Capture, analyze, and save color and monochrome images

Photometrics CoolSNAP cf

Integrated Devices

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12.3.4 Charge-Coupled Devices

A schematic view of a charge-coupled device (CCD) is shown in Fig. 22. The basic device consists of a closely spaced array of MOS diodes on a continuous insulator (oxide) layer that covers the semiconductor substrate.[15] Figure 22*a* shows a CCD to which sufficiently large, positive bias pulses have been applied to all the electrodes to produce surface depletion; a slightly higher bias has been applied to the center electrode so that the center MOS structure is under greater depletion and a potential well is formed there. If minority carriers (electrons) are introduced, they will be collected in the potential well. If the potential of the right-hand electrode is increased to exceed that of the central electrode, we obtain the potential distribution shown in Fig. 22*b*. In this case, the minority carriers will be transferred from the central electrode to the right-hand electrode. Subsequently, the potential on the electrodes can be readjusted so that the quiescent storage site is located at the right-hand electrode. By continuing this process, we can transfer the carriers successively along a linear array. Using this basic mechanism, CCDs can perform a wide range of electronic functions including image sensing and signal processing.

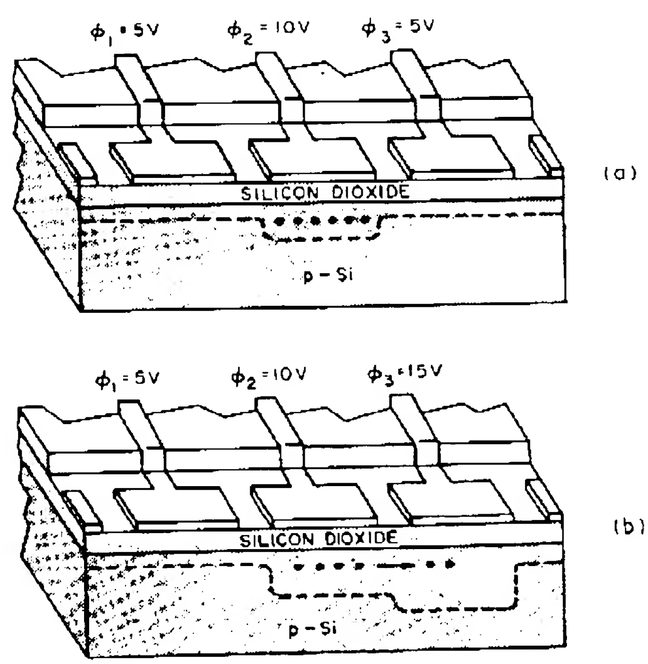

Fig. 22 Cross section of a three-phase charge-coupled device. (*a*) High voltage on ϕ_2. (*b*) ϕ_3 Pulsed to a higher voltage for charge transfer.[15]